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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/839,680	04/20/2001	Robin Speed	MS1-0600US	1810

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EXAMINER	
CZEKAJ, DAVID J	

ART UNIT	PAPER NUMBER
2621	

MAIL DATE	DELIVERY MODE
03/03/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/839,680	SPEED ET AL.	
	Examiner	Art Unit	
	DAVID CZEKAJ	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 January 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5,7-10 and 12-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,7-10 and 12-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *2/17/09*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/19/09 has been entered.

Response to Arguments

Applicant's arguments with respect to claims 1-5, 7-10, and 12-20 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-5 and 7-8 are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. While the claims recite a series of steps or acts to be performed, a statutory "process" under 35 U.S.C. 101 must (1) be tied to another statutory category (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or thing (Reference the May 15, 2008 memorandum issued by Deputy Commissioner for Patent Examining Policy, John J. Love, titled "Clarification of 'Processes' under 35 U.S.C. 101"). The instant claims neither transform underlying subject matter nor positively tie to another

statutory category that accomplishes the claimed method steps, and therefore do not qualify as a statutory process. It is unclear what performs, in electronic form, the generating, receiving, adding, subtracting, and sending steps recited in the method claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1-5, 7-10, 12-14, and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Radha et al. (6639943), (hereinafter referred to as "Radha") in view of Rose (6731811) in further view of Takashima (5754233) in further view of Luna et al. (6542541), (hereinafter referred to as "Luna").

Regarding claims 1, 8, 9, 10, and 19, Radha discloses an apparatus that relates to fine granular coding that includes both quality and temporal scalability (Radha: column 1, lines 11-13). This apparatus comprises "generating a motion compensated prediction of a region of content" (Radha: figure 7, column 7, lines 49-51, wherein the motion compensated prediction is generated by the motion estimation block, the region of content is the frames/streams), "receiving an indication of whether there are first and second quantities of residual samples remaining" (Radha: figures 5A and 8A, wherein the residual samples are contained with the enhancement and base layers, the indication is the process

from moving from one layer to the next. The examiner notes that the apparatus would not move from one layer to the next without all necessary data needed for further processing. Therefore a move from one layer to the next would indicate whether there are first and second quantities of residual samples) and "adding the first quantity of residual samples to the prediction" (Radha: figure 7, column 3, lines 15-27). However, Radha fails to show the subtraction and the indication comprising values associated with picture level parameters as claimed. Rose teaches that prior art coding systems cause undesired conflicts when trying to take advantage of additional information available to the enhancement layer (Rose: column 2, lines 10-14). To help alleviate this problem, Rose discloses "subtracting the second quantity of residual samples from the refined prediction value to generate a final representation" (Rose: figure 5, wherein the second set of residual samples is the multiple enhancement layers). Takashima teaches that bit rate control operations become complex in prior art encoding systems (Takashima: column 3, lines 10-14). To help alleviate this problem, Takashima discloses an indicator "comprising one or more values associated with picture level parameters" (Takashima: figure 8, column 2, lines 57-64, wherein the picture level parameters is the picture type). Luna teaches that prior art decoding schemes are unable to correct errors (Luna: column 4, lines 12-15). To help alleviate this problem, Luna discloses "sending any prediction control information for generation of a motion compensation region to an accelerator and sending an indication to the accelerator of whether the quantities of residual samples are to

be applied" (Luna: figure 2A; column 5, lines 63-67, wherein the accelerator is the co-processor; column 6, lines 18-25, wherein the indication is the go command) and "an API that facilitates the interoperability of one or more decoder applications with one or more decoder accelerators" (Luna: figure 2A; column 5, lines 47-67, wherein the accelerator is the co-processor which performs part of the decoding process and the processor performs the other part of the decoding process). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to take the apparatus disclosed by Radha, add the subtraction method taught by Rose, add the processing taught by Takashima, and add the accelerator and interface taught by Luna in order to obtain an apparatus that can properly detect and correct different kinds of errors.

Regarding claims 2 and 13, Radha discloses "the first and second residual samples are eight bit samples" (Radha: column 5, lines 37-45, wherein the pixel represents one byte or eight bits).

Regarding claims 3, 14, and 17, Radha discloses "performing an inverse discrete cosine transform of decoded transform domain representation of residual differences to be added to the motion compensated prediction" (Radha: figure 10, wherein the inverse discrete cosine transform is the inverse DCT, the addition is performed by the adder (item 58), and the motion compensated prediction is performed by the motion compensation block).

Regarding claims 4, 7, 12, and 18, Takashima discloses "the region is a block or macroblock" (Takashima: column 7, lines 30-39).

Regarding claims 5 and 16, Radha discloses "generating a prediction of media is performed by a graphics accelerator under the control of a decoder application" (Radha: figure 10, wherein the accelerator comprises the motion compensation and inverse DCT blocks).

2. Claims 15 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Radha et al. (6639943), (hereinafter referred to as "Radha") in view of Rose (6731811) in further view of Takashima (5754233)) in further view of Luna et al. (6542541), (hereinafter referred to as "Luna") in further view of Sriram et al. (6539059), (hereinafter referred to as "Sriram").

Regarding claims 15 and 20, note the examiners rejection for claim 1, and in addition, Radha discloses the complementary decoder performing the operations of the encoder disclosed in the preceding claims. Further, claims 15 and 20 require selecting an auto-negotiation structure. Sriram teaches that there is a need for an efficiently scalable decoder which facilitates efficiency, synchronization, flexibility and functionality (Sriram: column 2, lines 59-64). To help alleviate this need, Sriram discloses "an autonegotiation structure" (column 5 line 58- column 6, line 30, wherein the structure is the argument passing). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement the autonegotiation structure taught by Sriram in order to be able to correctly and effectively facilitate the use between multiple processors of a system.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID CZEKAJ whose telephone number is (571)272-7327. The examiner can normally be reached on Mon-Thurs and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571) 272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dave Czekaj/
Primary Examiner, Art Unit 2621